



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,776	09/10/2003	Thomas E. Mullan	VS-0241-US	3910
31864 7590 11/17/2009				
VIASAT, INC. C/O MICHELLE QUEZADA PATENT DEPARTMENT 6155 EL CAMINO REAL CARLSBAD, CA 92009				
EXAMINER				
AJAYI, JOEL				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
11/17/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENT-ADMIN@VIASAT.COM

chuck.pateros@viasat.com

su.steele@viasat.com

### Office Action Summary

**Application No.**

10/658,776

**Applicant(s)**

MULLAN ET AL.

**Examiner**

JOEL AJAYI

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-13, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-13, 15, and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 28, 2009 has been entered.

***Response to Arguments***

Applicant's arguments with respect to claims 11-13, 15, and 16 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bengeult et al.** (U.S. Patent Application Number: 2002/0087992) in view of **Dillon** (U.S. Patent Application Number: 2002/0108116), and further in view of **Nobakht et al.** (U.S. Patent Application Number: 2001/0054112).

Consider **claim 11**; Bengeult discloses a method for high-speed broadband communicating for a mobile platform, the method comprising: transmitting a first signal (return link) from a mobile communications terminal mounted in a vehicle (aircraft) to communicate with a base station (ground station) via a first antenna at the mobile communications terminal and a satellite (par. 32; 41-43, line 4); and transmitting a second signal (forward link) controlled by the base station (ground station) from the base station to communicate with the mobile communications terminal via the satellite and the first antenna at the mobile communications terminal (par. 34; 35, lines 1-12; par. 36), wherein the second signal (forward link) is controlled by the base station (ground station) in response to a data request contained in the first signal (par. 34; 35, lines 1-12; par. 36), the first and second signal are transmitted on a frequency and via a same transponder in the satellite (par. 35, lines 1-12), the second signal enables broadband communication with one or more individual data terminal devices in the vehicle (par. 32 and 36).

Bengeult discloses the claimed invention except: clearly stating that the first and second signals are transmitted on a same frequency.

In an analogous art Dillon discloses that the first and second signals are transmitted on a same frequency (par. 15, lines 11-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Bengeult by including a satellite that transmits multiple signals on a same frequency, as taught by Dillon, for the purpose of efficiently distributing satellite broadcast data transmissions dynamically among a plurality of communication channels to enhance broadcast efficiency.

Bengeult and Dillon disclose the claimed invention except: the second signal uses a signaling rate in a range from 512 kbps and 3.5Mbps.

In an analogous art Nobakht discloses that the second signal uses a signaling rate in a range from 512 kbps and 3.5Mbps (par. 98).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Bengeult and Dillon by including a signaling rate in a range from 512 kbps and 3.5Mbps, as taught by Nobakht, for the purpose of providing suitable services that require a certain data rate.

Consider **claim 12**; Bengeult discloses transmitting the first signal and transmitting the second signal comprise transmitting the first and second signals at different times (the return and forward links are not transmitted at the same time) (par. 32 and 36).

Consider **claim 13**; Bengeult discloses generating, at the base station (ground station), the second signal in response to the first signal (par. 32 and 36).

Consider **claim 15**; Bengcult discloses generating, in the mobile communications terminal, the first signal in response to a data communication request from the one or more individual data terminal devices in the vehicle (aircraft) (par. 32), the one or more individual data terminal devices being in two-way communication with the mobile communications terminal (bi-directional communication between a user and the server in the aircraft) (par. 32).

Consider **claim 16**; Bengcult discloses that the vehicle is an aircraft (par. 32), and the mobile communication terminal and the first antenna are compatible with the size, weight and power constraints of the aircraft (par. 33).

***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Joel Ajayi/

Examiner, Art Unit 2617

/Lester Kincaid/

Supervisory Patent Examiner, Art Unit 2617